LISTING OF CLAIMS

1. ***(currently amended)*** A recombinant attenuated coxsackievirus B4 virion which is engineered to contain a heterologous non-coxsackievirus nucleic acid within the open reading frame of its genome~~, wherein the heterologous nucleic acid encodes~~ encoding a heterologous non-coxsackievirus polypeptide which is ~~expressed by~~ fused to a capsid protein of the virion.

3. ***(currently amended)*** The recombinant attenuated coxsackievirus B4 virion of Claim 1 which is a CB4-P virion.

4. ***(currently amended)***: The recombinant CB4-P virion of Claim 3 wherein the heterologous nucleic acid is inserted in the P1 region of the genome.

5. ***canceled***

6. ***(currently amended)*** The recombinant CB4-P virion of Claim 4 [[5]] wherein the heterologous polypeptide is situated ~~expressed~~ within an immunogenic region of the viral capsid protein.

7. *(original)*: The recombinant CB4-P virion of Claim 6 wherein the heterologous nucleic acid is expressed as an internal fusion of VP1.

8. *(original)*: The recombinant CB4-P virion of Claim 6 wherein the viral capsid protein is VP1.

9. ***(currently amended)*** The recombinant CB4-P virion of Claim 8 [[6]] wherein the immunogenic region of VP1 comprises ~~contains~~ a B-cell epitope~~s~~, a T-cell epitope~~s~~, or both a B cell epitope and a T cell epitope.

10. *(original)*: The recombinant CB4-P virion of Claim 8 wherein the heterologous polypeptide is situated ~~expressed~~ within ~~the viral capsid protein~~ VP1 at a position which corresponds to the DE loop.

11. *(original)*: The recombinant CB4-P virion of Claim 10 wherein the heterologous nucleic acid is directly downstream of codon 129 of VP1 coding sequences.

12. *(original):* The recombinant CB4-P virion of Claim 11 wherein the heterologous nucleic acid replaces nucleic acid sequences corresponding to VP1 codons 130-137 of wild type CB4-P.

13. ***(previously presented):*** The recombinant CB4-P virion of Claim 4 wherein the heterologous nucleic acid is inserted in-frame and directly upstream of sequences which encode VP4, with the proviso that the insertion is optionally directly 3' from the AUG codon beginning at nucleotide 744 of the coxsackievirus B4 RNA genome that encodes the N-terminal Met of native viral polyprotein.

14. *(original):* The recombinant CB4-P virion of Claim 13 wherein the heterologous polypeptide is expressed as an amino-terminal fusion of the viral polyprotein.

15. *(original):* The recombinant CB4-P virion of Claim 14 wherein the amino-terminal fusion is susceptible to cleavage from the viral polyprotein by a viral protease.

17. ***(previously presented)::*** The recombinant CB4-P virion of Claim 14 wherein the length of insert is from about 60 to about 360 nucleotides.

18. ***(currently amended)*** A nucleic acid comprising the complete genome of a recombinant attenuated coxsackievirus B4 virion which is engineered to contain a heterologous non-coxsackievirus nucleic acid insert within the open reading frame of its genome, wherein the ~~heterologous nucleic acid~~ insert encodes a heterologous non-coxsackievirus polypeptide which in the virion is ~~expressed by~~ fused to a capsid protein ~~the virion~~.

20. *(original):* The nucleic acid of Claim 18 wherein the attenuated coxsackievirus is CB4-P.

21. *(original):* The nucleic acid of Claim 20 which is an infectious cDNA of the CB4-P genome.

22. *(original):* The nucleic acid of Claim 20 which is an infectious RNA of the CB4-P genome.

23. ***(currently amended)*** The nucleic acid of Claim 20 wherein the insert ~~heterologous nucleic acid~~ is inserted into the P1 region of the genome.

24. ***(currently amended)*** The nucleic acid of Claim 23 wherein the insert ~~heterologous nucleic acid~~ is ~~inserted~~ in[[to]] the coding region of VP1.

25. *(currently amended)* The nucleic acid of Claim 24 wherein the insert ~~heterologous nucleic acid~~ is ~~inserted~~ in[[to]] sequences which encode the DE loop of VP1.

26. *(currently amended)* The nucleic acid of Claim 25 wherein the insert ~~heterologous nucleic acid~~ is directly downstream of codon 129 of the VP1 coding sequences.

27. *(currently amended)* The nucleic acid of Claim 26 wherein the insert ~~heterologous nucleic acid~~ replaces codons 130-137 of VP1 coding sequences.

28. *(currently amended)*: The nucleic acid of Claim 20 wherein the ~~heterologous nucleic acid~~ insert is ~~inserted~~ in-frame and directly upstream of sequences which encode VP4, with the proviso that the insert~~ion~~ is optionally 3' from the AUG codon, at nucleotide positions 744-746 of the coxsackievirus B4 RNA genome, that encodes the N-terminal Met of native viral polyprotein.

30. *(currently amended)* The nucleic acid of Claim 26 wherein the insert ~~heterologous nucleic acid~~ is from about 25 nucleotides to about 39 nucleotides in length.

31. *(amended)*: The nucleic acid of Claim 26 wherein the polypeptide ~~insert~~ is immunogenic ~~antigenic~~ when ~~expressed in~~ fused to the ~~context of the~~ CB4-P VP1 capsid protein ~~genome~~.

32. *(amended)* : The nucleic acid of Claim 31 wherein the insert ~~further~~ encodes a T cell epitope, a B cell epitope, or both a T cell epitope and a B cell epitope.

33. *(original)*: The nucleic acid of Claim 31 wherein the insert encodes an viral polypeptide or a fragment thereof.

34. *(currently amended)* The nucleic acid of Claim 31 wherein the insert encodes a~~n bacterial pathogen~~ polypeptide of a bacterial pathogen or a fragment thereof.

35. *(original)*: The nucleic acid of Claim 31 wherein the insert encodes an HIV polypeptide or a fragment thereof.

36. *(original)*: The nucleic acid of Claim 35 wherein the insert encodes HIV p24 or a fragment thereof.

54. ***(currently amended:*** A method for inducing an immune response to a polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated coxsackievirus B4 virion of claim 1; and~~

~~(b)~~ administering the recombinant attenuated coxsackievirus B4 virion of claim 1 to the subject under conditions appropriate for infection by the virion.

55. ***(currently amended:*** A method for inducing an immune response to a polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated coxsackievirus B4 virion CB4-P of claim 3; and~~

~~(b)~~ administering the recombinant attenuated coxsackievirus B4 virion CB4-P of claim 3 to the subject under conditions appropriate for infection by the virion.

56. ***(previously presented):*** The method of Claim 54 wherein the recombinant attenuated coxsackievirus B4 virion is formulated with a physiologically acceptable carrier.

57. ***(previously presented):*** The method of Claim 54 wherein the immune response comprises the generation of a cytotoxic T-cell response, a T helper cell response, B cell response, or any combination thereof.

58. ***(previously presented):*** The method of Claim 54 wherein the heterologous nucleic acid encodes a T-cell epitope.

59. ***(currently amended)*** A method for inducing an immune response to a polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated CB4-P virion of claim 32; and~~

~~(b)~~ administering ~~the~~ a recombinant attenuated CB4-P virion comprising the nucleic acid of claim 32 to the subject under conditions appropriate for infection by the virion.

60. ***(currently amended):*** A method for inducing an immune response to a polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated CB4-P virion of claim 7; and~~

~~(b)~~ administering the recombinant attenuated CB4-P virion of claim 7 virion to the subject under conditions appropriate for infection by the virion.

61. ***(currently amended)***: A method for inducing an immune response to a polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated CB4-P virion of claim 14; and~~

~~(b)~~ administering the recombinant attenuated CB4-P virion of claim 14 to the subject under conditions appropriate for infection by the virion.

62. ***(currently amended):*** A method for inducing an immune response to a polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated CB4-P virion of claim 15; and~~

~~(b)~~ administering the recombinant attenuated CB4-P virion of claim 15 to the subject under conditions appropriate for infection by the virion.

63. ***(currently amended):*** A method for inducing an immune response to a bacterial polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated CB4-P virion of claim 34; and~~

~~(b)~~ administering ~~the~~ a recombinant attenuated CB4-P virion comprising the heterologous nucleic acid of claim 34 to the subject under conditions appropriate for infection by the virion.

64. ***(previously presented):*** The method of Claim 63 wherein the immune response prevents or inhibits progression of a disease in the subject caused by bacteria comprising the heterologous bacterial polypeptide.

65. ***(currently amended)***: A method for inducing an immune response to a viral polypeptide in a subject, comprising:

~~(a) providing the recombinant attenuated CB4-P virion of claim 33; and~~

~~(b)~~ administering ~~the~~ a recombinant attenuated CB4-P virion comprising the nucleic acid of claim 33 to the subject under conditions appropriate for infection by the virion.

66. ***(previously presented):*** The method of Claim 65 wherein the immune response prevents or inhibits progression of a disease in the subject caused by a virus comprising the heterologous viral polypeptide.

67. ***(previously presented):*** The method of Claim 65 wherein the viral polypeptide is an HIV polypeptide or a fragment thereof.

68. ***(previously presented):*** The method of Claim 67 wherein the HIV polypeptide is p24 or a fragment thereof.

69. ***(previously presented):*** The method of Claim 54 wherein the subject is human.

70. ***(previously presented):*** The method of Claim 54 wherein the subject is a nonhuman animal.

71. ***(previously presented):*** The method of Claim 54 wherein the subject is immunocompromised.

72. ***(currently amended):*** A method for delivering a polypeptide to a subject, comprising:

~~a)~~ administering to the subject, under conditions appropriate for infection, ~~providing~~ a recombinant attenuated coxsackievirus B4 virion which is engineered to comprise ~~contain~~ a heterologous non-coxsackievirus nucleic acid insert within the open reading frame of its genome, which insert ~~heterologous nucleic acid~~ encodes the polypeptide being delivered, which is

(i) a heterologous non-coxsackievirus polypeptide ~~that expressed by~~ fused to a capsid protein of the virion,

(ii) ~~which heterologous polypeptide is~~ expressed as an amino-terminal fusion with coxsackievirus B4 viral polyprotein; and

(iii) [[is]] susceptible to cleavage by a viral protease that cleaves the heterologous polypeptide from the viral polyprotein~~; and~~

~~(b) administering the virion to the subject under conditions appropriate for infection by the virion~~,

thereby delivering the polypeptide.